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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/895,307	06/29/2001	Hong Jiang	42390P10579	2386

8791 7590 09/12/2007  
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EXAMINER
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CZEKAJ, DAVID J

ART UNIT	PAPER NUMBER
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2621

MAIL DATE	DELIVERY MODE
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09/12/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

09/895,307

Applicant(s)

JIANG, HONG

Examiner

Dave Czekaj

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 5-8, 10-14, 16-19, 21-25, 27, 28, 30-33, 35, 36, 38 and 41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-8, 10-14, 16-19, 21-25, 27, 28, 30-33, 35, 36, 38 and 41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/18/07 has been entered.

### ***Response to Arguments***

On pages 13-14, applicant argues that Wu fails to disclose an enhancement residual addition applies to a final base layer output after a base layer clipping operation and not before a base layer clipping operation. While the applicant's points are understood, the examiner respectfully disagrees. The examiner notes the added limitation appears to be redundant. Not before a base layer clipping operation is understood by the examiner to be after a base layer clipping operation in which case the limitation reads wherein an enhancement residual addition applies to a final base layer output after a base layer clipping operation and after a base layer clipping operation. See for example Wu figure 20. There Wu illustrates a base layer clipping operation 632. The output of this clipping operation is fed into a buffer 634 and then a motion compensator 622. The output is then fed to the adder of the enhancement layer. Hence, the enhancement residual is added to the base layer output after the clipping operation is performed. Further, the intermediate enhancement layer can be

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considered a "base layer" to the upper enhancement layer, in which case the output of the clipping operation 650 is fed to a frame buffer 652 and then a motion compensator 624. The output is then fed to a DCT 662, HQPD predictor 664, and finally to an adder 672. Further, no calculation of enhancement layer quantization residue is performed in the intermediate or upper enhancement layers. Therefore the rejection has been maintained.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 5-8, 10-14, 16-19, 21-25, 27-28, 30-33, 35-36, 38, and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu et al. (6700933), (hereinafter referred to as "Wu").

As for Claim's 1, 2, 6, 7, 11, 12, 16, 17, 21-25, 27-28, 30-33, 35-36, 38, and 41, Wu et al. teaches a method and system for encoding and decoding a video sequence of pictures by generating a first body of data, that he calls the base layer and lower quality video, as well as a second body of data that is dependent upon the video sequence and a reconstructed portion of the first body of data, this he calls this the enhancement layers and higher quality video (Wu: figures 1, 9, and 20; Column 3, lines 17-26; Column 6, lines 48-51; Column 7, lines 17-20). He teaches reusing the circuitry for generating the first body of data

that generates the second body of data in Figure 9. The output of Reference numbers 208 and 210 are inputs for the second body of data. Figure 20 shows the decoding operations on the first and second bodies of data. Figure 20 also shows the combining of the first and second bodies of data which is also useful in reusing the circuitry for decoding the first and second bodies of data at Reference points 626 and 622. The output of these reference points shows how they are then inputs to the second body of data. Figure 20 also shows how the output of Reference point 632 combines the clipped data of the first and second bodies of data where the reconstructed portion of the first body of data includes data that have been clipped (Wu: Column 21, lines 37-41; see also Figure 20). Wu further discloses an enhancement residual addition applies to a final base layer output after a base layer clipping operation and not before a base layer clipping operation (Wu: figure 20). While Wu fails to disclose the enhancement processing is independent of any intermediate data in the base layer, Wu does disclose that the enhancement or higher quality layers are predicted from at least the same or lower quality layer, but not necessarily the base layer (Wu: column 7, lines 17-20). The examiner notes that in the cases where multiple enhancement layers are used, as show in Wu's figures 4-5, the enhancement layers can be processed without using information from the base layer. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement the enhancement processing

independent of data in the base layer in order to obtain an apparatus that operates more efficiently by not relying on data from previous calculations.

As for Claim's 3, 8, 14 and 19, Wu et al. teaches that the units of the second bodies of data include a block of video data (Wu: Column 10, lines 14-28).

As for Claim's 5, 10, 13 and 18, Wu et al. teaches a method and instructions to determine the difference between the source video sequence and the reconstructed portion of the first body of data (Wu: figures 20 and 21; Column 21, lines 8-15; Column 22, lines 10-17).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dave Czekaj whose telephone number is (571) 272-7327. The examiner can normally be reached on Mon-Thurs and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571) 272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Dave Czekaj  
TC 2600